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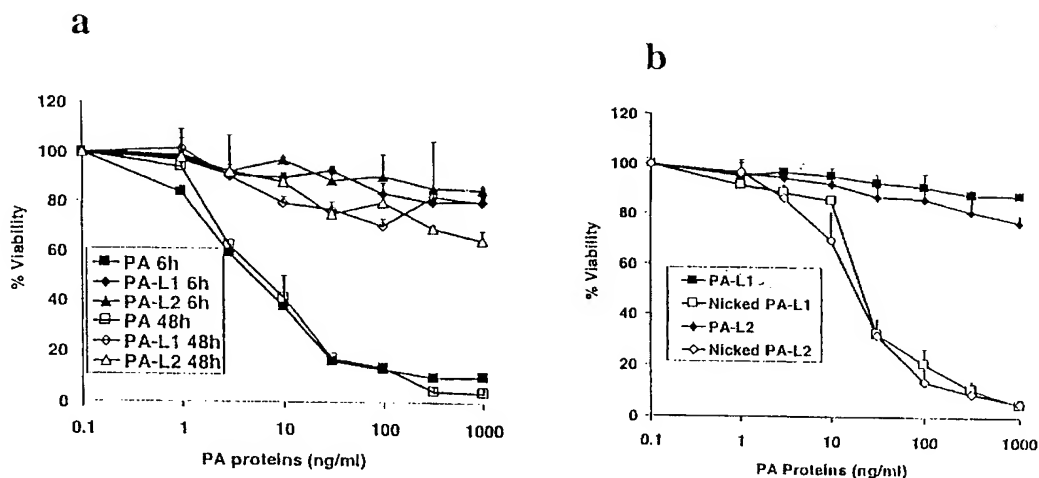
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(54) Title: MUTATED ANTHRAX TOXIN PROTECTIVE ANTIGEN PROTEINS THAT SPECIFICALLY TARGET CELLS CONTAINING HIGH AMOUNTS OF CELL-SURFACE METALLOPROTEINASES OR PLASMINOGEN ACTIVATOR RECEPTORS



(57) Abstract: The present invention provides methods of specifically targeting compounds to cells overexpressing matrix metalloproteinases, plasminogen activators, or plasminogen activator receptors, by administering a compound and a mutant protective antigen protein comprising a matrix metalloproteinase or a plasminogen activator-recognized cleavage site in place of the native protective antigen furin-recognized cleavage site, wherein the mutant protective antigen is cleaved by a matrix metalloproteinase or a plasminogen activator overexpressed by the cell, thereby translocating into the cell a compound comprising a lethal factor polypeptide comprising a protective antigen binding site.



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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/32 C07K19/00 C07K14/25 A61K39/07 A61K48/00  
A61K39/108

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, BIOSIS, EMBL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 677 274 A (NICHOLS PETER J ET AL) 14 October 1997 (1997-10-14) column 1, line 9 - line 17 column 3, line 27 - line 31 column 4, line 12 - line 19 column 10, line 5 -column 11, line 60 ---	1-24
A	US 5 817 771 A (BAYLEY HAGEN ET AL) 6 October 1998 (1998-10-06) figure 10 column 8, line 7 - line 40 example 3 --- -/--	1-24

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>LIAW L ET AL: "FUNCTIONS OF THE EXTRACELLULAR MATRIX AND MATRIX DEGRADING PROTEASES DURING TUMOR PROGRESSION" BRAZILIAN JOURNAL OF MEDICAL AND BIOLOGICAL RESEARCH,BR,RIBEIRAO PRETO, vol. 32, no. 7, July 1999 (1999-07), pages 805-812, XP000872134 ISSN: 0100-879X page 809 -page 810</p> <p>-----</p>	1-3,6-9, 23,24
A	<p>MAZAR ET AL: "High-affinity, small cyclic peptide urokinase plasminogen activator receptor (uPAR)-targeting ligands localize reporter and therapeutic conjugates to the surfaces of tumor cells and stimulated endothelial cells" PROCEEDINGS OF THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH,US,PHILADELPHIA, PA: AACR, vol. 40, March 1999 (1999-03), page 22 XP002131000 abstract</p> <p>-----</p>	1,4,5, 23,24

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